F.No.10-24/2017-IA-III Government of India Ministry of Environment, Forest and Climate Change (IA.III Section)

Indira Paryavaran Bhawan. Jor Bagh Road, New Delhi - 3

Date: 9th October, 2019

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M/s Himachal Pradesh Power Corporation Limited Himfed Bhawan, Panjari, Below Old MLA Quarters, Bypass Road, Shimla, Chamba -176312, Himachal Pradesh. Email: dgmrcp@gmail.com

Subject: Installation of material ropeways 5 nos. for the construction of Deothal Chanju 30 MW hydroelectric project at Village Dantoi, Tehsil Chaurah, District Chamba, Himachal Pradesh by M/s Himachal Pradesh Power Corporation Limited - Environmental Clearance - reg.

Sir,

This has reference to your online proposal No. IA/HP/MIS/90253/2017 dated 4th February, 2019, submitted to this Ministry for grant of Environmental Clearance (EC) in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986.

The proposal for grant of environmental clearance to the project 'Installation of 2. material ropeways 5 nos. for the construction of Deothal Chanju 30 MW hydroelectric project at Village Dantoi, Tehsil Chaurah, District Chamba, Himachal Pradesh by M/s Himachal Pradesh Power Corporation Limited, was considered by the Expert Appraisal Committee (Infra-2) in its 39th meeting held on 26-28 March, 2019. The details of the project, as per the documents submitted by the project proponent, and also as informed during the above meeting, are as under:-

- The Hydro Electric Power Plant (HEP) of capacity 30 MW has been proposed by (i) State Government of Himachal Pradesh in Churah tehsil of District Chamba of Himachal Pradesh by Himanchal Pradesh Power Corporation Limited (HPPCL).
- The proposed Material Ropeway shall be developed above the Chanju Nallah in (ii) Village Dantoi, Tehsil Churah, District Chamba, Himachal Pradesh for transportation of construction materials required for the construction of HEP 30 MW. The break-up of land use is given below:

| Area required for | | | | Area (ha) | Type of Land |
|--|--------|----------|---|-----------|--------------|
| Ropeway Platform (i) Longitudinal Ropeways) | (Cross | ropeways | & | 1.44 ha | Forest land |
| Ropeway Span (ii) | | | | 3.94 ha | Forest land |
| Total (i+ii) | | | | 5.38 ha | Forest land |

- (iii) The ropeway shall be used for transportation of construction material i.e. cement, steel reinforcement in cut lengths, steel ribs, aggregates, steel liner etc. and the machinery/ equipment i.e. welding sets, tipping trolleys, air compressor, concrete mixtures, concrete placers, air receiver tank, drilling equipment etc. for construction of Deothal-Chanju Hydro Electric Power plant (30 MW).
- The proposed system consists 5 no. of cross ropeways across the nallah and 1 (iv) longitudinal ropeway (Six Sections) connecting all the take off points of cross ropeways from road head to the trench weir along the right bank of Chanju Nallah based on Bi-cable Jig Back and Twin Track Bi cable ropeway system. Each Cross Ropeways consist of loading and unloading stations and longitudinal ropeway will

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connect all loading points of cross ropeways. The alignment of the project covers an area of 5.38 ha (including loading and unloading area, tower and corridor area). The pay load capacity of each ropeway lies between 2 MT- 3 MT. The area of land for the proposal under forest land. The maximum elevation of the ropeways will be 2810 m above MSL.

- The project being an Aerial Ropeway falls under the activity 7 (g) of the EIA (v) notification, 2006 and is a designated Project as per Schedule and falls under category A, as the terminal of all ropeways are at elevation of more than 1000 m MSL.
- The total population will be 60 including workers during construction phase and 10 (vi) no. of staff during operation phase.
- Total water requirement will be 5 KLD mainly for flushing, domestic and (vii) miscellaneous purposes. Water will be sourced from Chanju Nallah Water (Spring Water). Total quantity of wastewater generation will be 3.8 KLD which will be disposed off in septic tanks via soak pit.
- Power requirement during operation phase will be 500 KW which will be sourced by (viii) DG sets as there is no other source of power at the selected locations. Thus, DG sets installed during construction phase will remain in use during operational phase i.e. 7x35 KVA, 2x40 KVA, 2x30 KVA & 2x50 KVA.
- Total 8 Kg/day of Bio-degradable waste and 3 kg/day of recyclable waste will be (ix)generated from the employee and labours. The organic waste will be sent to nearby municipal site. The Recyclable Waste Collected and given to approved recycler.
- There is No national park/Wild Life Sanctuary in 10 km radius of the site. (X)
- Terms of Reference was granted by MoEF&CC vide letter F.No.10-24/2017-IA-III (xi) dated 17.08.2018.
- Public Hearing was held on 26.10.2018. (xii)
- Total 5.38 ha forest land area will be required for the development of the ropeway (xiii) which involves towers, loading & unloading area and including ropeway corridor.
- There will be felling of 493 no. trees. An area of 53,800 sqm (5.38 ha) of forest land (xiv)will be diverted. This activity will be carried out as per the guidelines of the Forest (Conservation) Act, 1980. However, compensatory afforestation shall be done in the ratio of 1:10.
- Used oil generated from the DG sets will be sent to authorize hazardous waste (xv)disposal authority.
- Usage of electricity will mainly be for the operation of ropeway & services. However, (xvi) conservation of energy will be practiced by the following methods:
- Energy efficient motors & VFD shall be used as per ECBC Norms. (xvii)
- DG Sets shall be of latest standards. (xviii)
- Garland drains will be proposed around the pillars/towers for drainage of storm water. (xix)
- The increase in vehicles will be managed in the open space available, adequate (xx)space is at the loading station for providing organized vehicle parking.
- Cost of project is Rs. 62.89 Crore. (xxi)
- Employment potential: During construction phase, approx. 60 labours shall be (xxii) employed. The un-skilled labor can be procured from the local villages/towns providing employment opportunities to the local population. During the operational phase, about 10 persons would be required for technical and administrative functions.

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Project Benefits: The main objective of installation of the proposed ropeway, as (xxiii) mentioned earlier, is to transport construction material for HEP. Looking at various options of transport system, there are only two options available either road transport or aerial ropeway system, in which ropeway installation is fast, eco-friendly as well as economic. Ropeway System can negotiate steep gradient, with less space. Ropeway is an environment friendly system. There will be very less impact of the ecology and environment during the installation and operation of ropeway system. There will not be stress on the forest and its coverage can be maintained intact during the operation. There will not be any conflict on the wild life as the operation of ropeway does not generate any vibrations, sound, heat, etc. that might have negative impact on the wild life. Ropeway, generally, does not change the land use pattern. It rarely requires displacement or relocation. Being aerial, it does not obstruct the movement underneath. As ropeway is electrically operated, there will not be additional pressure on the requirement of fossil fuel for transportation of materials. Since Ropeway will directly transfer the material, it will reduce the contamination and wastage of the material.

3. The project/activity is covered under category A of item 7(g) 'Aerial Ropeways' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level as the terminal of all ropeways are at elevation of more than 1000 m MSL.

4. The Committee also deliberated upon the issues raised during the Public Hearing/Public Consultation meeting conducted by the HP State Pollution Control Board on 26.10.2018. The issues raised regarding employment, compensation to farmers and impact on environment due to the proposed project. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report. The Committee also noted that diversion of total 5.38 ha of forest land will be required for the development of the ropeway which involves towers, loading & unloading area and including ropeway corridor.

5. The project proponent vide letter No. HPPCL/GM/RCP/G-8/2019-925-27 dated 09.08.2019 has submitted in-principle approval for diversion of 15.64 ha of forest land received from MoEFCC Regional Office (North Cetntral Zone), Dehradun vide letter No. 8B/HP/01/63/2019/F.C./1003 dated 05.08.2019.

6. The EAC in its 39th meeting held on 26-28 March, 2019, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended the project for grant of environmental clearance with stipulated specific conditions along with other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity, while considering for accord of environmental clearance. As per recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance to the project 'Installation of material ropeways 5 nos. for the construction of Deothal Chanju 30 MW hydroelectric project' at Village Dantoi, Tehsil Chaurah, District Chamba, Himachal Pradesh Power Corporation Limited, under the provisions of the EIA Notification, 2006 and amendments/circulars issued thereon, and subject to the specific and general conditions as under:-

A - SPECIFIC CONDITIONS:

- (i) The project shall be governed as per the Himachal Pradesh Aerial Ropeways Act, 1968. Necessary clearances in this regard shall be obtained and strictly complied with.
- (ii) All the Terms and conditions given in Stage-I Forest Clearance by MoEFCC Regional Office (North Cetntral Zone), Dehradun vide letter No. 8B/HP/01/63/2019/F.C./1003 dated 05.08.2019 shall be followed in letter and spirit.

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- (iii) The project shall be implemented only after obtaining the clearances under the Forest Conservation Act and the Wild Life Protection Act 1972 as applicable.
- (iv) The ropeway should include all the public hearing concerns in the management plan and execute them satisfactorily and monitored regularly as per law.
- (v) A detailed traffic management and a traffic decongestion plan should be drawn up round the project and implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.
- (vi) Solar energy shall be used in the project i.e. at upper terminal and lower terminal to reduce the carbon footprint.
- (vii) Adequate infrastructure, including power, shall be provided for emergency situations and disaster management.
- (viii) During construction phase, 5 KLD water will be required which will be met from Chanju Nallah Water (Spring water).
- (ix) As proposed, wastewater will be disposed off in 2 no. of soak pits via septic tanks.
- (x) Regular safety inspection shall be carried out of the ropeway project and a copy of safety inspection report should be submitted to the Regional Office, MoEFCC.
- (xi) An onsite disaster management plan shall be drawn up to account for risks and accidents. This onsite plan shall be dovetailed with the onsite management plan for the district.
- (xii) No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the Concerned Regulatory Authority / Forest Department. Old trees should be retained based on girth and age regulations as may be prescribed by the Concerned Regulatory Authority / Forest Department. Plantations to be ensured species (cut) to species (planted). The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- (xix) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1st May 2018, and proposed by the project proponent, an amount of Rs. 125.78 lacs (@2% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as road side plantation & sprinkling system, toilet infrastructure development/ sanitation, skill development centre & library and solar power generation. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

B. Standard Conditions:

I. Statutory compliance:

- i. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- ii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area)

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- iii. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- iv. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- v. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act, 1980 and the Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation:

- i. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission) covering upwind and downwind directions.
- ii. Appropriate Air Pollution Control (APC) system (both during the construction and operation) shall be provided for all the dust generating points *inter alia* including loading, unloading, transfer points, fugitive dust from all vulnerable sources, so as to comply prescribed standards.
- iii. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- iv. Adequate parking shall be constructed at upper terminal and lower terminal. PP shall ensure smooth traffic management.

III. Water quality monitoring and preservation:

- i. Storm water from the project area shall be passed through settling chamber.
- ii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
- iv. Prior permission from competent authority shall be obtained for use of fresh water.
- v. No wastewater shall be discharged in open. Appropriate Water Pollution Control system shall be provided for treatment of waste water.
- vi. A certificate from the competent authority, in case of discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.

IV. Noise monitoring and prevention:

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

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V. Energy Conservation measures:

- i. Energy conservation measures like installation of LED/CFLs/TFLs for lighting should be integral part of the project design and should be in place before project commissioning.
- ii. Solar energy shall be used in the project i.e. at upper terminal and lower terminal to reduce the carbon footprint.

VII. Waste management

- The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
- ii. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016.
- iii. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.

VIII. Public hearing and Human health/safety issues:

- i. Comply with the safety procedures, norms and guidelines (as applicable) as outlined in IS 5228, IS 5229 and IS 5230, code of practice for construction of aerial ropeways, Bureau of Indian Standards.
- ii. Maintaining hoists and lifts, lifting machines, chains, ropes, and other lifting tackles in good condition.
- Ensuring that walking surfaces or boards at height are of sound construction and are provided with safety rails or belts.
- iv. The project should conform to the norms prescribed by the Director General Mine safety. Necessary clearances in this regard shall be obtained.
- v. Adequate infrastructure, including power, shall be provided for emergency situations and disaster management.
- vi. Adequate first aid facility shall be provided during construction and operation phase of the project.
- vii. Regular safety inspection shall be carried out of the ropeway project and a copy of safety inspection report should be submitted to the Regional Office.
- viii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

IX Corporate Environment Responsibility:

- i. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / deviation / violation of the environmental / forest / wildlife norms / deviation / violation of the environmental / forest / wildlife norms / deviation / violation of the environmental / forest / wildlife norms / deviation / violation of the environmental / forest / wildlife norms / and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- ii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection

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measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

iv. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous:

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC).
- x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public

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Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

- Any appeal against this EC shall lie with the National Green Tribunal, if preferred, XV. within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- This issues with the approval of the Competent Authority. 7.

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Copy to:

- The Additional Chief Secretary, Department of Environment, Science and 1) Technology, Paryavaran Bhawan, Near US Club, Shimla, Himachal Pradesh -171001.
- The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum- Office 2) Complex, East Arjun Nagar, Delhi - 32
- The Member Secretary, Himachal Pradesh State Pollution Control, Board, Him 3) Parivesh, Phase-III, New Shimla - 171009, Himachal Pradesh.
- The Additional Principal Chief Conservator of Forests (C), Ministry of Environment, 4) Forest and Climate Change, Regional Office (NCZ), Regional Office (NCZ), 25, Subhash Road, Dehradun - 248001.
- Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi. 5)
- Guard File/Monitoring File. 6)
- MoEF&CC website. 7)

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